

WATER RATE STUDY

July 17, 2013

Prepared by:



July 17, 2013

Mr. Rudi Golnik
City Engineer
City of Hollister
375 Fifth St.
Hollister, CA 95023

Subject: Water Rate Study Report

Dear Mr. Golnik,

Raftelis Financial Consultants, Inc. (RFC) is pleased to provide the Water Rate Study Report (Report) for the City of Hollister to address current financial challenges the City is facing and to establish water rates that are equitable and in compliance with Proposition 218.

The major objectives of the study include the following:

1. Develop financial plans for the Water Enterprises to ensure financial sufficiency, meet operations and maintenance (O&M) costs, ensure sufficient funding for capital replacement needs, and improve the financial health of the enterprises;
2. Create rate structures for the Water Enterprise that promotes conservation as well as maintains equity amongst customer classes;
3. Develop connection fees for the Water Enterprise.

The Report summarizes the key findings and recommendations related to the development of the rate studies for the Water Enterprises.

It has been a pleasure working with you, and we thank you and City staff for the support provided during the course of this study.

Sincerely,

Raftelis Financial Consultants, Inc.



Sanjay Gaur
Senior Manager

Table of Contents

BACKGROUND OF THE STUDY	4
OBJECTIVES OF THE STUDY	4
1 WATER SYSTEM	4
1.1 WATER ASSUMPTIONS	4
1.2 WATER INFLATION FACTORS	5
1.3 WATER GROWTHS AND DEMAND FACTORS	5
1.4 WATER FINANCIAL PLAN	5
1.4.1 STATUS QUO FINANCIAL PLAN	7
1.4.2 PROPOSED FINANCIAL PLAN	11
2 RATE DESIGN	13
2.1 BACKGROUND	13
2.2 RATE METHODOLOGY BACKGROUND	14
2.3 RATE METHODOLOGY	15
2.3.1 FUNCTIONAL COST COMPONENTS	17
2.4 RATE IMPACTS	18
2.5 PROPOSED WATER RATES	20
3 WATER CONNECTION FEES	21

Background of the Study

In 2012, the City of Hollister engaged RFC to conduct a Water Rate Study (Study) to develop a solvent financial plan as well as design rates for the water system.

The City's Water Enterprise is operating in an environment where revenues from rates are outpaced by operating and debt expenditures, caused primarily by significant capital expenditures for necessary upgrades to the water systems.

The increase in operating and debt expenditures from the Lessalt Water Treatment Plant and West Hills Surface Water Treatment Plant represent the most significant pressure on net revenues. The City has instructed RFC to propose the level of water rates needed for financial sufficiency for the projected operating and capital expenditures and other financial obligations.

Objectives of the Study

The major objectives of the study include the following:

1. Develop a financial plan for the water enterprise to ensure financial sufficiency, meet operations and maintenance (O&M) costs, ensure sufficient funding for capital projects, and improve the financial health of the enterprises;
2. Review current rate structures for the Water Enterprise;
3. Develop a cost-of-service analysis for the Water Enterprise;
4. Develop fair and equitable water rates; and
5. Develop connection fees.

1 Water System

1.1 Water Assumptions

The study period for the Water Rate Study is from Fiscal Year (FY) 2013 to 2019. Various types of assumptions and inputs were incorporated into the Study. These assumptions were based on discussion with and/or direction from City staff (Staff), including projected accounts and annual growth rates in accounts, assumptions regarding proposed new debt issuances, and other miscellaneous assumptions. These assumptions are presented in Tables 1-1 and 1-2.

1.2 Water Inflation Factors

Table 1-1: Inflation Factor Assumptions

KEY FACTORS	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Salary	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Benefits	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
General	0.0%	3.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Utility	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Insurance	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Capital	0.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Interest	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

1.3 Water Growths and Demand Factors

Table 1-2: Account Growth Rate Assumptions and Water Demand Factor

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
GROWTH RATE							
Account Growth	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
DEMAND FACTOR	<i>% Increase of prior consumption</i>						
Water Demand Factor	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

1.4 Water Financial Plan

The City owns and operates a water utility serving approximately 6,000 customers. The City contracts its surface water delivery from San Benito County Water District (SBCWD), which has a municipal and industrial entitlement from the Central Valley Project delivered through San Felipe facility. The surface groundwater is treated at Lessalt Surface Water Treatment Plant, which is a shared facility between the City and Sunnyslope County Water District. The City has contracted with Raftelis Financial Consultants in 2012 to conduct a comprehensive Water Rate Study.

In FY 2013, revenues generated from rates and other miscellaneous revenues are sufficient to recover the total operating expenses of the Water Enterprise. However, as mentioned earlier, the City will incur significant operating expenses as a result of the Lessalt Water Treatment Plant and the West Hills Surface Water Treatment Plant. Table 1-3 on the following page displays the projected revenues for FY 2013 – 2019 (study period). Table 1-4 displays total projected expenses for the study period.

Table 1-3: Revenues for FY 2013 – 2019

Revenues	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Revenues from Rates	\$3.59	\$3.59	\$3.59	\$3.64	\$3.70	\$3.75	\$3.81
Miscellaneous Revenues	\$0.14	\$0.15	\$0.15	\$0.16	\$0.16	\$0.17	\$0.18
Rate Stabilization Funds from SBCWD	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenues	\$3.73	\$3.73	\$3.74	\$3.80	\$3.86	\$3.92	\$3.98

The City derives most of its revenues from the sale of water as shown in the line item “Revenues from Rates” in Table 1-3. “Revenues from Rates” are increasing due to the projected growth to occur in the City. In addition, the City receives a nominal amount of revenues from miscellaneous sources such as delinquency charges and water tank maintenance. San Benito County Water District (SBCWD) has offered rate stabilization funds which are reflected in Table 1-3 under the line item “Rate Stabilization Funds from SBCWD”. The rate stabilization funds are to be utilized by the City to ensure that it meets debt coverage requirements and that rate increases is stabilized. However, following analysis of the proposed debt associated with the Lessalt and West Hills treatment plant, the City has opted to utilize the rate stabilization funds to pay down the debt principal associated with the two projects. By utilizing the rate stabilization funds in this way, the City stands to save \$3.3 million over the life of the loans. The revenue numbers for both the operations and the Lessalt and West Hills debt information were provided by the City.

Table 1-4: Expenses for FY 2013 - 2019

Expenditures	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
San Benito Capital Recovery	\$0.00	\$0.27	\$0.84	\$0.84	\$0.84	\$0.84	\$0.84
Lessalt & West Hills O&M	\$0.00	\$0.36	\$0.48	\$0.67	\$2.51	\$2.55	\$2.59
Hollister O&M	\$3.05	\$3.17	\$3.29	\$3.23	\$3.31	\$3.43	\$3.54
Total Expenses	\$3.05	\$3.80	\$4.61	\$4.74	\$6.66	\$6.81	\$6.97

As shown in Table 1-4, the City will incur additional expenses based on the operations and maintenance of the Lessalt and West Hills treatment plant. This plant will become operational in FY 2014; the additional expenses are shown on Table 1-4 under the “Lessalt & West Hills O&M” line item. In addition, the City will incur capital expenses related to the treatment plant upgrades; these expenses are

reflected in Table 1-4 under the line item “San Benito Capital Recovery”. The Lessalt & West Hills O&M expense numbers as well as the San Benito Capital Recovery numbers were provided by the City.

1.4.1 Status Quo Financial Plan

As shown in Table 1-3 and Table 1-4, total expenditures rapidly outpace total revenues. As a result of these additional expenses, the City is unable to maintain fiscal sustainability and solvency under the current water rates (Status Quo). The causes of the increase in expenses are the O&M and Debt expense incurred as a result of the Lessalt & West Hills projects. The City’s O&M expenses are growing at less than 3 percent per year. Figures 1-1, 1-2, 1-3, 1-4 are a graphical representation of the City under current or “Status Quo” water rates.

Figure 1-1: Status Quo Revenue Adjustments

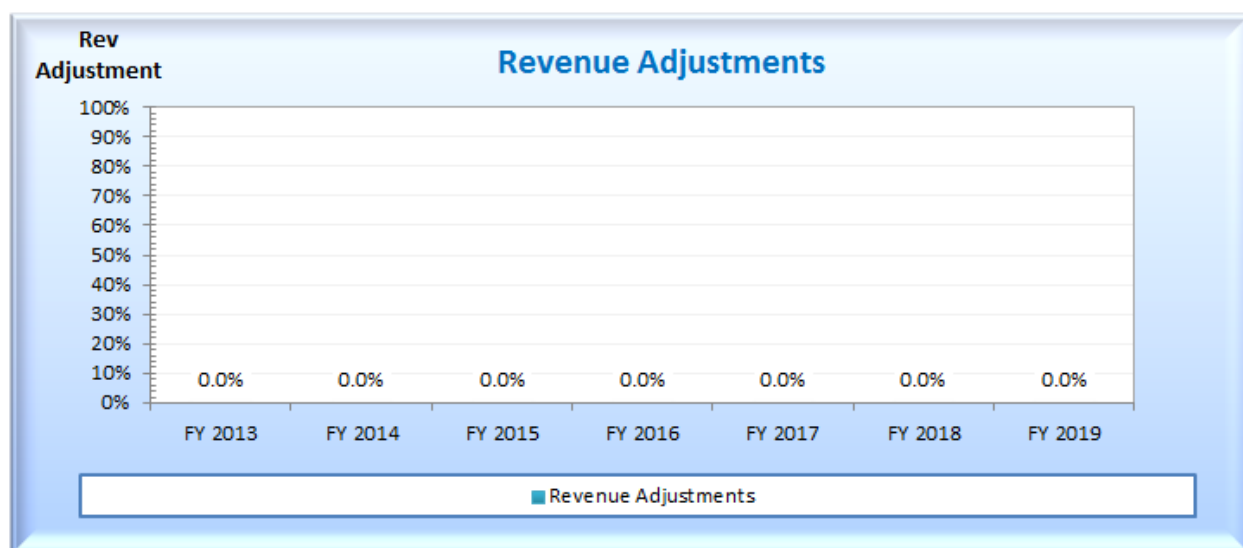


Figure 1-1 displays the revenue adjustments and the debt coverage for the City under the Status Quo. As displayed, there are no revenue adjustments because the Status Quo scenario assumes current rates, which means no revenue adjustments. The blue bar displays the revenue adjustments, which is at zero percent.

Figure 1-2: Status Quo Operating Financial Plan

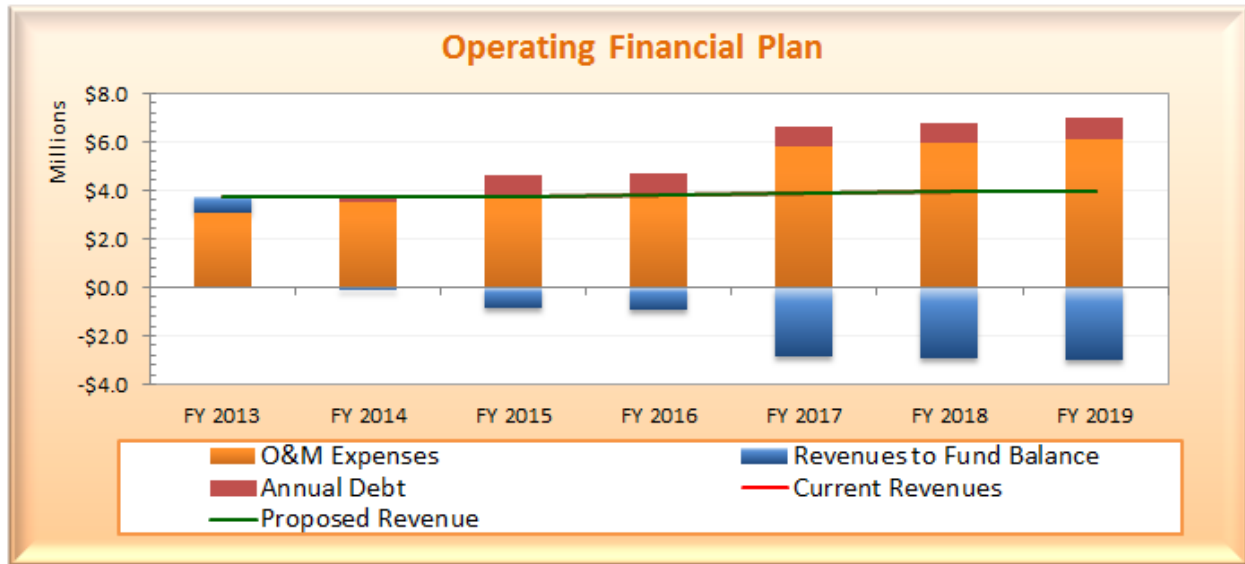


Figure 1-2 displays the operating financial plan. The different colored, stacked bars represent the City's operating and non-operating expenses. The Red line represents revenues at current rates, while the green line represents revenues at proposed rates. Since this chart displays the Status Quo, proposed and current revenues are equal as there are no proposed revenue adjustments under the Status Quo scenario. The blue bar displays the revenues to Fund Balance and shows that the enterprise will be at a deficit beginning FY 2014. Under the Status Quo scenario, the deficit grows each year.

Figure 1-3: Status Quo Capital Improvement Projects (CIP)

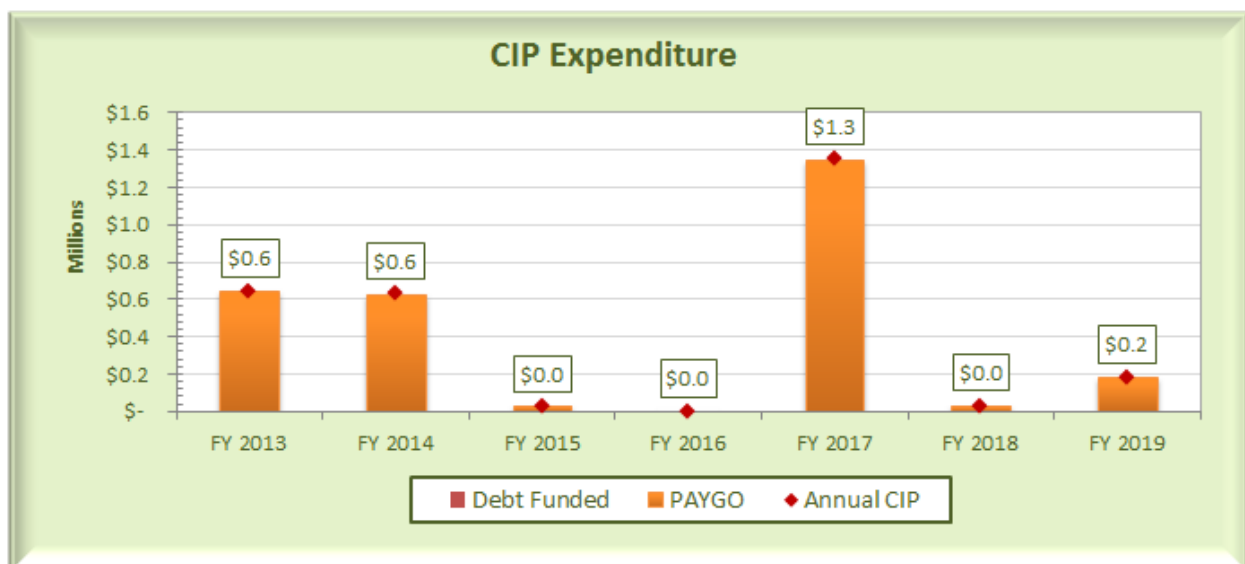


Figure 1-5 displays the Capital Improvement Project (CIP) schedule through the study period. The orange bars display the amount of CIP the City will expend per year that is cash funded. The red bars display the

amount of CIP that will be debt funded. The City does not plan on issuing any debt to finance future capital projects.

Figure 1-4: Status Quo Water Fund

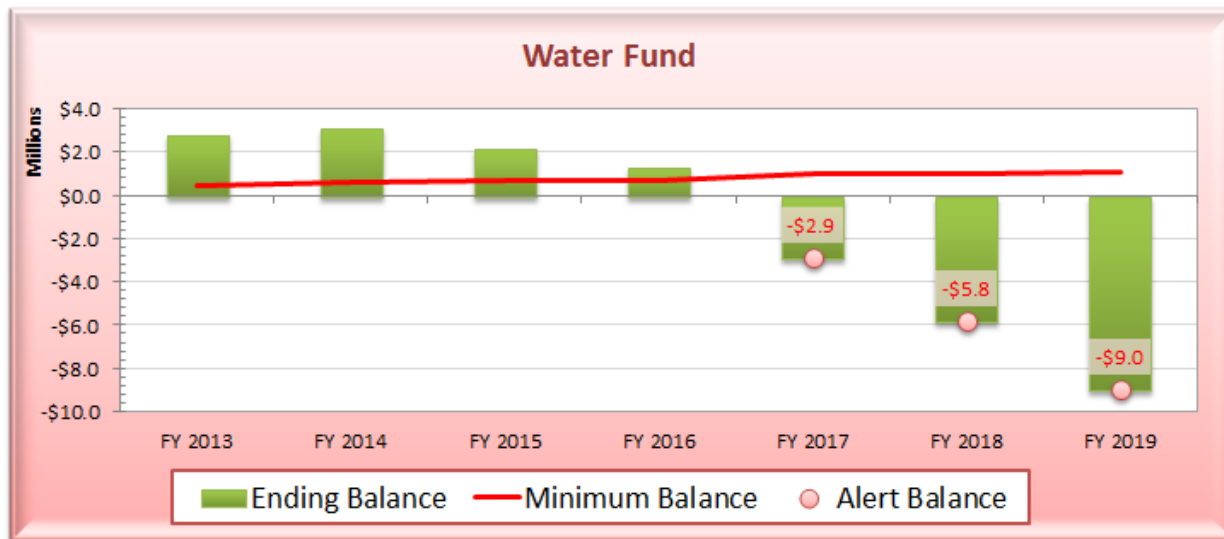


Figure 1-4 displays the Water Fund balance. This figure shows the amount of cash that the City has available for the Water Enterprise. The green bars display the projected amount of cash available each fiscal year. The Red line indicates the minimum balance the City should have in its Water Fund; this amount is set by the City and is based on the City's fiscal policy, which is 15 percent of the annual operating budget. The red dot is an alert balance; when the projected balance falls under the minimum balance, the alert balance displays the amount of cash in the Water Fund. As displayed in Figure 1-4, under Status Quo, the Water Fund will fall below the minimum balance in 2017 and will continue to fall over the following years. At the end of the study period, the Water Fund is projected to be at -\$9.0 million under Status Quo water rates.

Table 1-5, below, further illustrates the City's financial position under the Status Quo by displaying the information in a tabular Pro Forma format. Table 1-5 displays all the revenues, expenditures (including proposed debt, capital expenditures and O&M) and the water fund balance.

Table 1-5: Status Quo Pro Forma

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Revenues							
Revenue Under Existing Rates	\$3,587,516	\$3,587,516	\$3,587,516	\$3,641,328	\$3,695,948	\$3,751,387	\$3,807,658
Revenue Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Revenues	\$140,800	\$145,024	\$150,825	\$156,858	\$163,132	\$169,658	\$176,444
San Benito Rate Stabilization	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Revenues:	\$3,728,316	\$3,732,540	\$3,738,341	\$3,798,186	\$3,859,080	\$3,921,045	\$3,984,102
Revenue Requirements							
O&M Expenses w/o Lessalt	\$3,048,826	\$3,171,322	\$3,291,414	\$3,229,620	\$3,312,858	\$3,425,660	\$3,543,232
Lessalt O&M	\$0	\$362,775	\$481,066	\$672,771	\$2,510,907	\$2,549,376	\$2,589,011
Debt Service	\$0	\$265,883	\$839,804	\$839,804	\$839,804	\$839,804	\$839,804
Subtotal Revenue Requirements:	\$3,048,826	\$3,799,980	\$4,612,285	\$4,742,195	\$6,663,569	\$6,814,840	\$6,972,048
Net Cash Flows:	\$679,490	-\$67,440	-\$873,944	-\$944,009	-\$2,804,489	-\$2,893,795	-\$2,987,946
Fund 620 - Water Fund Reserves							
Beginning Balance	\$2,748,000	\$2,787,990	\$3,092,776	\$2,206,079	\$1,270,763	-\$2,883,563	-\$5,806,605
Capital Improvements (-)	-\$643,000	-\$630,000	-\$26,000	\$0	-\$1,349,837	-\$29,246	-\$182,498
Debt Proceed Balances (+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow (+)	\$679,490	-\$67,440	-\$873,944	-\$944,009	-\$2,804,489	-\$2,893,795	-\$2,987,946
Interest Income (+)	\$3,500	\$12,227	\$13,247	\$8,692	\$0	\$0	\$0
JPA Proceeds	\$0	\$990,000	\$0	\$0	\$0	\$0	\$0
Ending Balance	\$2,787,990	\$3,092,776	\$2,206,079	\$1,270,763	-\$2,883,563	-\$5,806,605	-\$8,977,049
Target Reserve Balance	\$457,324	\$569,997	\$691,843	\$711,329	\$999,535	\$1,022,226	\$1,045,807

The City will receive \$990,000 in funds from the dissolution of the Joint Powers Authority (JPA) in FY 2014 as detailed under the "JPA Proceeds" line in the Pro Forma. The JPA will be dissolved as the Lessalt and West Hills treatment plants come online. To ensure that the Water Enterprise will have adequate revenues to fund operating expenses, capital expenditures, and meet debt coverage requirements, RFC recommends the following water revenue adjustments (Table 1-6). A detailed discussion of the water financial plan is included in the following section.

Table 1-6: Proposed Water Revenue Adjustments

<u>Effective Date</u>	<u>Proposed Water Revenue Adjustments</u>
January 2014	13.0 percent
January 2015	13.0 percent
January 2016	13.0 percent
January 2017	13.0 percent
January 2018	13.0 percent
January 2019	0.0 percent

1.4.2 Proposed Financial Plan

As mentioned in the previous sections, proposed expenses greatly outpace revenues. In order to bridge the gap, revenue adjustments as shown in Table 1-6 will be necessary for the City to remain financially solvent. Figures 1-5, 1-6, 1-7 and 1-8 graphically display the effects of the proposed revenue adjustments on the City's financial position.

Figure 1-5: Proposed Revenue Adjustments

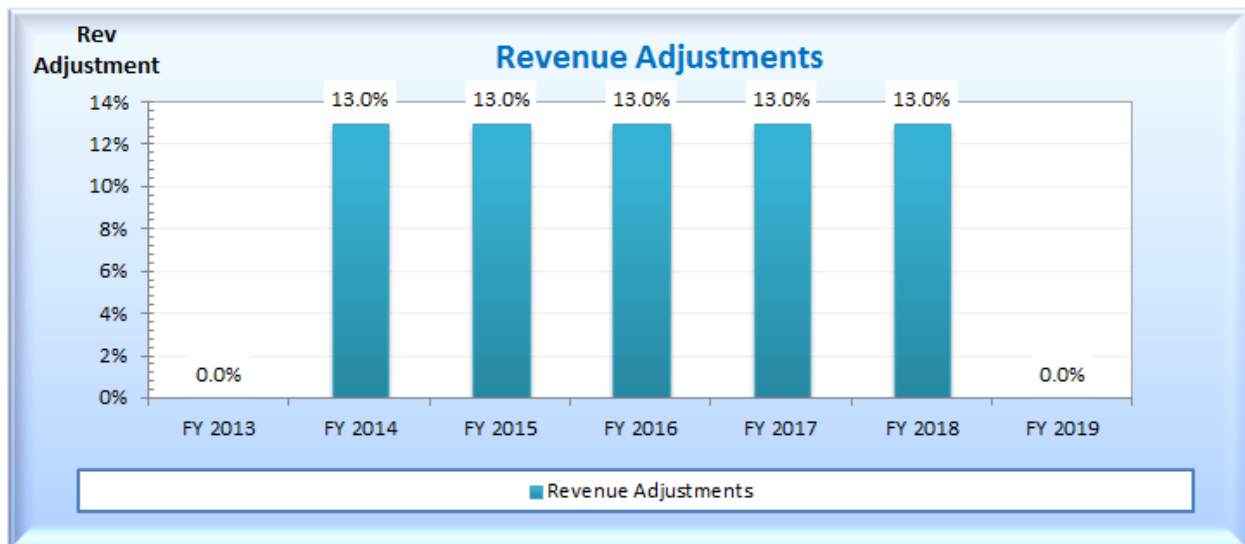


Figure 1-5 displays the revenue adjustments of the proposed financial plan. In the proposed scenario, the City will increase revenues by 13.0 percent for 5 years (FY 2014 – 2018). Under these revenue adjustments, the City is projected to meet its operating financial plan.

Figure 1-6: Proposed Operating Financial Plan

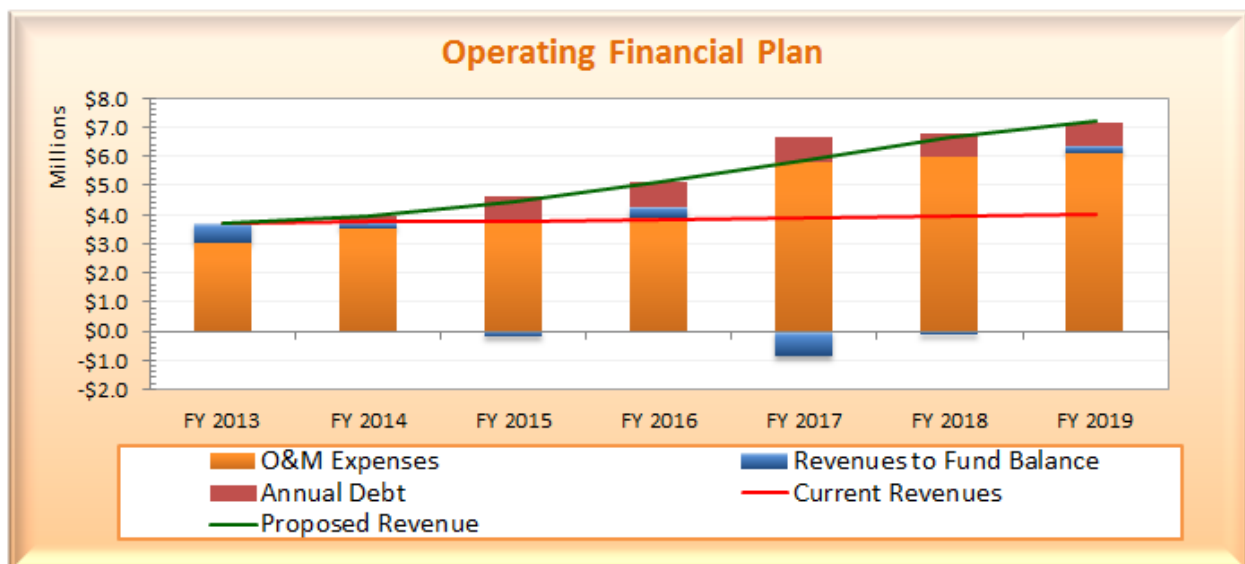
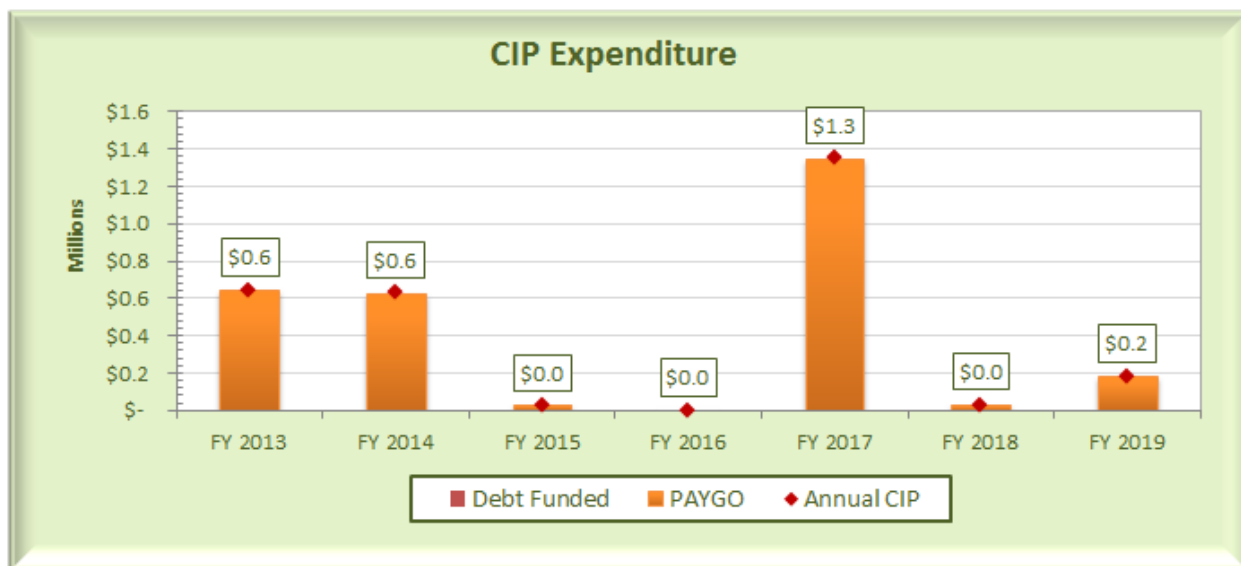


Figure 1-6 displays the proposed operating financial plan. As mentioned earlier, the green line displays the proposed revenues. Under the proposed scenario, the City is projected to have a positive net income in FY 2014, 2016 and 2019. In FY 2015, 2017 and 2018, the City is projected to operate at a negative net income. Although there are years where the City is projected to have negative income, the City's cash reserves is projected to remain healthy as shown on Figure 1-8 below. The proposed rate increases will allow the City's revenues from water sales to cover its total expenditures.

Figure 1-7: Proposed CIP Expenditures



The CIP expenditures are the same under both the Status Quo and Proposed scenarios.

Figure 1-8: Proposed Water Fund Balance

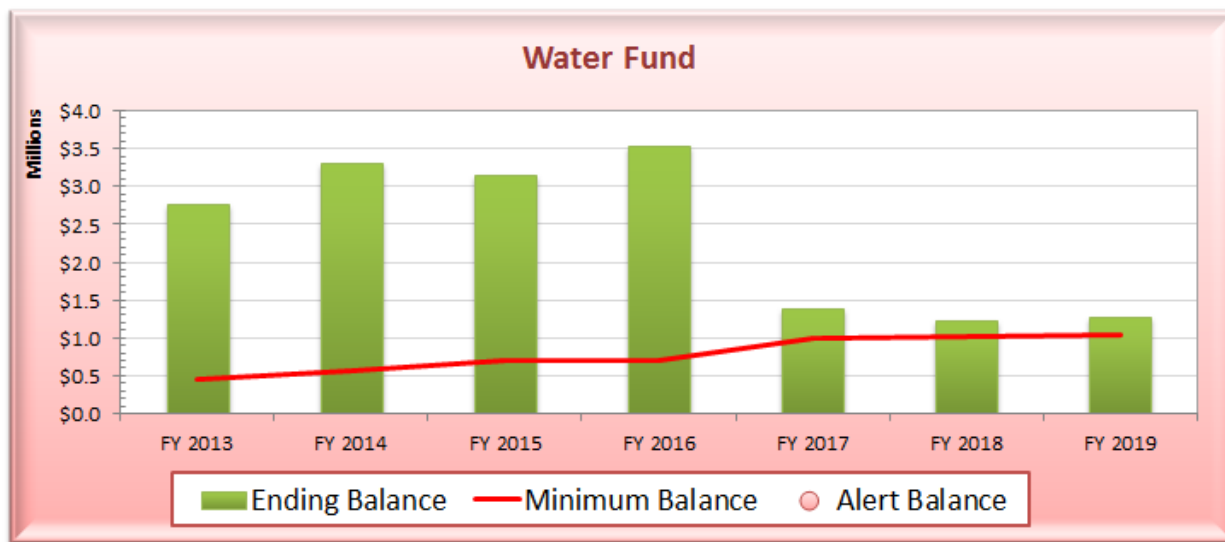


Figure 1-8 displays the Water Fund Balance under the Proposed Scenario. As a result of increasing revenues to the level shown in Figure 1-6; the Water Fund Balance remains healthy and above the target balance throughout the Study period.

Table 1-7: Proposed Pro Forma

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Revenues							
Revenue Under Existing Rates	\$3,587,516	\$3,587,516	\$3,587,516	\$3,641,328	\$3,695,948	\$3,751,387	\$3,807,658
Revenue Adjustments	\$0	\$233,189	\$729,880	\$1,310,509	\$1,983,561	\$2,762,726	\$3,207,705
Other Revenues	\$140,800	\$145,024	\$150,825	\$156,858	\$163,132	\$169,658	\$176,444
San Benito Rate Stabilization	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Revenues:	\$3,728,316	\$3,965,728	\$4,468,221	\$5,108,695	\$5,842,642	\$6,683,771	\$7,191,807
Revenue Requirements							
O&M Expenses w/o Lessalt	\$3,048,826	\$3,171,322	\$3,291,414	\$3,229,620	\$3,312,858	\$3,425,660	\$3,543,232
Lessalt O&M	\$0	\$362,775	\$481,066	\$672,771	\$2,510,907	\$2,549,376	\$2,589,011
Debt Service	\$0	\$265,883	\$839,804	\$839,804	\$839,804	\$839,804	\$839,804
Subtotal Revenue Requirements:	\$3,048,826	\$3,799,980	\$4,612,285	\$4,742,195	\$6,663,569	\$6,814,840	\$6,972,048
Net Cash Flows:	\$679,490	\$165,748	-\$144,064	\$366,500	-\$820,928	-\$131,069	\$219,759
Fund 620 - Water Fund Reserves							
Beginning Balance	\$2,748,000	\$2,787,990	\$3,326,549	\$3,172,733	\$3,556,055	\$1,397,675	\$1,243,963
Capital Improvements (-)	-\$643,000	-\$630,000	-\$26,000	\$0	-\$1,349,837	-\$29,246	-\$182,498
Debt Proceed Balances (+)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Annual Cash Flow (+)	\$679,490	\$165,748	-\$144,064	\$366,500	-\$820,928	-\$131,069	\$219,759
Interest Income (+)	\$3,500	\$12,811	\$16,248	\$16,822	\$12,384	\$6,604	\$6,329
JPA Proceeds	\$0	\$990,000	\$0	\$0	\$0	\$0	\$0
Ending Balance	\$2,787,990	\$3,326,549	\$3,172,733	\$3,556,055	\$1,397,675	\$1,243,963	\$1,287,553
Target Reserve Balance	\$457,324	\$569,997	\$691,843	\$711,329	\$999,535	\$1,022,226	\$1,045,807

Table 1-7 displays the proposed financial plan scenario in a Pro Forma format. With the proposed rate increases, operating revenue will be able to keep pace with total expenditures. The proposed rate increases will enable the City to fully fund the Water Enterprise and maintain healthy reserves in the Water Fund balance.

2 Rate Design

2.1 Background

The City's current rate design is a three-tiered inclining water rate system. The current rates and tiers are shown in Table 2-1 on the following page.

Table 2-1: Current Rates and Tiers

**Starting with the August 1, 2009 Billing,
New Sewer Rates are in effect (Water rates unchanged):**

Meter Service Charge		Consumption Charge	
		Monthly Service	
<u>Meter Size Charge No HCF Allocation</u>		<u>Single-Family Residential</u>	
<i>Inside City</i>		\$ 2.46 0 to 30 hcf	
5/8"	\$ 4.50**	\$ 2.82 31 to 50 hcf	
3/4"	\$ 4.50	\$ 3.67 over 50 hcf	
1"	\$10.61	<u>Multi-Family Residential</u>	
1 1/2"	\$20.68	\$ 2.48 0 to 100 hcf	
2"	\$31.47	\$ 2.85 101 to 150 hcf	
3"	\$62.93	\$ 3.71 over 150 hcf	
4"	\$94.39	<u>Commercial / Institutional</u>	
6"	\$188.78	\$ 2.11 0 to 100 hcf	
8"	\$292.16	\$ 2.43 101 to 150 hcf	
<i>Outside City</i>		\$ 3.16 over 150 hcf	
5/8"	\$ 4.86	<u>Industrial</u>	
3/4"	\$ 4.86	\$ 2.19 0 to 400 hcf	
1"	\$11.46	\$ 2.52 over 400 hcf	
1 1/2"	\$22.33	<u>Landscape Irrigation</u>	
2"	\$33.98	\$ 2.16 0 to 250 hcf	
3"	\$67.96	\$ 2.49 over 250 hcf	
4"	\$101.94		
6"	\$203.89		

**Most single family residential dwellings have 5/8" meters

Table 2-1 displays the Current Rates and Tiers. Tier 1 for Single-Family Residential (SFR) encompasses 100 cubic feet (HCF¹) of usage to 30 HCF, Tier 2 for usage of 31 HCF to 50 HCF, and Tier 3 for all usage above 50 HCF. The City also has the fixed-meter service charge divided into two classifications: Inside City and Outside City. Outside City residents are charged an 8 percent premium over those paid by inside city customers for each respective meter services fee. These classifications are based on the location of each property.

2.2 Rate Methodology Background

Proposition 218 (California Constitution Article 13D) states that:

1. A property-related charge (such as water rates) imposed by a public agency on a parcel shall not exceed the funds required to provide the property related service.
2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed.

¹ Hundred Cubic Feet (HCF) is equal to 748 gallons

3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.

As stated in the Manual M1, “the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers.”²

Prop 218 ensures that Water Rates cannot be “arbitrary and capricious”, meaning that the rate-setting methodology must be sound and that there must be a nexus between costs and the rate charge. In the Rate Methodology, RFC ensures that all aspects of Proposition 218 are followed and that the rate structure creates rates that charge customers equitably.

2.3 Rate Methodology

After much discussion with City Staff and the City Council, the goals and objectives of the rates are as follows: Affordability for essential use, conservation and revenue stability. In order to achieve these objectives, RFC designed rates with these tenets in mind.

The utility’s total revenue requirements net of revenue credits from miscellaneous sources is, by definition, the cost of providing service, as shown in Table 2-2. This cost is then used as the basis to develop unit costs for the water components and then to allocate costs to the various customer classes in proportion to the water services rendered. The concept of proportionate allocation to customer classes requires that allocations should be taken into consideration not only for the average quantity of water used but also the peak rate at which it is consumed. The water system is designed to handle peak demands and the costs associated with design and construction of facilities used to meet peak demands; these costs need to be allocated so that peaking costs can be recovered appropriately. In this study, water rates were calculated for FY 2014, and accordingly FY 2014 is defined as the Test Year. Test Year revenue requirements are used in the cost allocation process. Subsequent years’ revenue adjustments are incremental and the rate adjustments for future years are calculated across the board. The City should review the cost of service analysis every five years to ensure that the rates are consistent with the costs of providing service.

The annual revenue requirements or costs of service to be recovered from commodity charges include operations and maintenance (O&M) expenses and capital costs. O&M expenses include costs directly related to the supply, treatment, and distribution of water as well as routine maintenance of system

² Ziebertz, Bill, AWWA Staff, Principles of Water Rates Fees and Charges 6th Edition (M1), 2012, Print

facilities. This maintenance is often referred to as routine capital and represents the annual recurring capital outlay for minor system improvements and purchases of materials and supplies.

The total FY 2014 cost of service to be recovered from the City's water customers, shown in Table 2-2, is estimated at approximately \$4.1 million. Approximately \$3.5 million of this total is for operating costs, 266 thousand for existing debt service for capital projects and the remaining 145 thousand for miscellaneous sources. The cost of service analysis is based upon the premise that the utility must generate annual revenues adequate to meet the estimated annual revenue requirements. As part of the cost of service analysis, revenues from sources other than water rates and charges (e.g. revenues from miscellaneous services) are deducted from the appropriate cost elements. Additional deductions are made to reflect interest income and other non-operating income during FY 2014. Adjustments are also made to account for cash balances to ensure adequate collection of revenue and to determine annual revenues needed from rates.

Table 2-2: Current Rates and Tiers

	Operating Expense	Capital Expense	Total
Revenue Requirements			
O&M Expenses	\$ 3,534,097		\$ 3,534,097
Existing Debt Service		\$ 265,883	\$ 265,883
Proposed Debt Service			\$ -
Capital Projects Expenses (PAYGO)			\$ -
Subtotal	\$ 3,534,097	\$ 265,883	\$ 3,799,980
Less Rev. Requirements Met from Other Sources			
San Benito Rate Stabilization Funds	\$ -		\$ -
Meter Charges	\$ 6,180		\$ 6,180
Delinquencies	\$ 133,900		\$ 133,900
Sunnyslope Water Tank	\$ 4,944		\$ 4,944
Subtotal	\$ 145,024	\$ -	\$ 145,024
Less Adjustments			
Adjustments for Annual Cash Balance	\$ (165,748)		\$ (165,748)
Adjustments to Annualize Rate Increase	\$ (233,189)		\$ (233,189)
Net Revenue to be recovered from Rates	\$ 3,788,009	\$ 265,883	\$ 4,053,893

To allocate the cost of service among the different customer classes, costs first need to be allocated to the appropriate water cost components. The following section describes the allocation of the operating and capital costs of service to the appropriate parameters of the water system.

2.3.1 Functional Cost Components

The total cost of water service is analyzed by system function in order to equitably distribute costs of service to the various classes of customers. For this analysis, water utility costs of service are assigned under the Base-Extra Capacity method to three basic functional cost components: base costs, extra capacity or peaking costs, and customer-service related costs. This method is consistent with the American Water Works Association M1 Manual, and is widely used in the water industry to design rates for retail customers.

Base Costs

Base costs are those operating and capital costs of the water system associated with serving customers at a constant average rate of use. For the City, the base is set at the average winter usage for single-family residents. Supply costs are typically considered to be based on average usage.

Extra Capacity Costs

Extra capacity or peaking costs represent those costs incurred to meet customer peak demands for water in excess of average day usage. Total extra capacity costs are subdivided into costs associated with maximum day and maximum hour demands. The maximum day demand is the maximum amount of water used in a single day in a year. The maximum hour (Max Hour) demand is the maximum usage in an hour on the maximum usage (Max Day) day. Different facilities are designed to meet different peaking characteristics. For example, transmission lines are designed to meet Max Day requirements. Transmission lines have to be designed larger than they would be if the same annual amount of water were being used at a constant rate throughout the year. The cost associated with constructing a larger line is based on the idea of “overdesign”, and is proportioned according to the Max Day factor. For example, if the Max Day factor is 2.0, then the line should be designed twice as large as required to meet average-only usage conditions. In this case, half of the cost would be allocated to Base or average and the other half allocated to Max Day. Table 2-3 displays the Base and Extra Capacity rates that are associated with the aforementioned costs. In addition, Table 2-3 displays the proposed commodity rates for FY 2014 for Single Family Residential (SFR) customer as well as Non-Single Family Residential (NON-SFR) customers.

Table 2-3: Proposed Commodity Rates and Tiers

Customer Class		Block width	Base Rate	Peaking Rate	Proposed					
					Total Rate	Existing Rate				
SFR										
	Tier 1	9	\$	2.06	\$	-	\$	2.07	\$	2.46
	Tier 2	15	\$	2.06	\$	1.27	\$	3.40	\$	2.82
	Tier 3	15 +	\$	2.06	\$	1.75	\$	3.89	\$	3.67
Non SFR										
			\$	2.06	\$	0.63	\$	2.69	\$	2.48

The proposed tiers for the new commodity rates are based off of usage analysis of the City. The Tier 1 width of 9 HCF is based on the average winter usage for single-family residential customers. The proposed rates also take into account price elasticity. As the proposed commodity rates for Tier 2 and Tier 3 are higher than the current commodity rates, water usage in those tiers are projected to decline. The Tier 1 price reflects only the base cost. The Tier 2 block width is based on average summer usage for single-family residential customers, and the price is composed of the base cost of delivery plus additional peaking costs. Tier 3 block width is anything above 15 HCF of usage. Non-single family residential customers will be charged a flat rate.

Customer -Service Related costs

Customer service costs include customer-related and meter-related costs. Customer costs are uniform for all customers and include such costs as meter reading, billing, collecting, and accounting. Meter service costs include maintenance and capital costs associated with meters and a portion of the capacity related costs. RFC utilized the American Water Works Association (AWWA) Meter Ratio in calculating the meter component, as is industry practice. These costs are assigned based on meter size or equivalent meter capacity. Table 2-4 displays the proposed FY 2014 meter charges separated by meter size. Total proposed meter charge includes both billing and customer service charge and the meter component charge.

Table 2-4: Proposed Meter Charge

Meter Size	AWWA Meter Ratio	Current Meter Ratio	Meter Component	Billing and Customer Service	Total Meter Charges	Existing Charges	Difference \$	Difference %
5/8"	1.00	1.00	\$6.72	\$1.43	\$8.15	\$4.50	\$3.65	81%
3/4"	1.00	1.00	\$6.72	\$1.43	\$8.15	\$4.50	\$3.65	81%
1"	2.50	2.36	\$15.84	\$1.43	\$17.27	\$10.61	\$6.66	63%
1 1/2"	5.00	4.60	\$30.88	\$1.43	\$32.31	\$20.68	\$11.63	56%
2"	8.00	6.99	\$46.99	\$1.43	\$48.42	\$31.47	\$16.95	54%
3"	17.50	13.98	\$93.96	\$1.43	\$95.39	\$62.93	\$32.46	52%
4"	31.50	20.98	\$140.94	\$1.43	\$142.37	\$94.39	\$47.98	51%
6"	65.00	41.95	\$281.87	\$1.43	\$283.31	\$188.78	\$94.53	50%
8"	120.00	64.92	\$436.23	\$1.43	\$437.67	\$292.16	\$145.51	50%

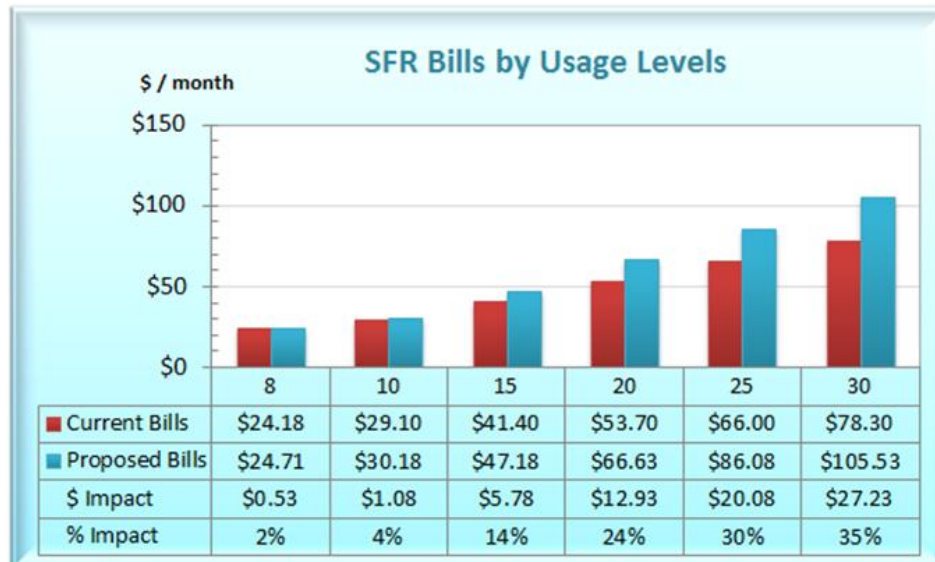
The differences between the existing charges and proposed charges are shown by dollar amount and percentage change in Table 2-4 above.

2.4 Rate Impacts

The goals in designing the proposed rates are affordability for essential use, water conservation and revenue stability. RFC designed the proposed water rates to reflect these goals. Tier 1, which is based on average winter usage, is three cents lower than the previous Tier 1 rate. By decreasing commodity rates for essential water usage, the goal of affordability is achieved. In addition, Tier 2 and Tier 3 commodity rates have been increased to promote the goal of conservation. Finally, a larger portion of the water bill is tied to the fixed meter charge, which results in increased revenue stability for the City. RFC prepared an analysis to examine the impacts of the proposed rates. The following customer impact chart shown in

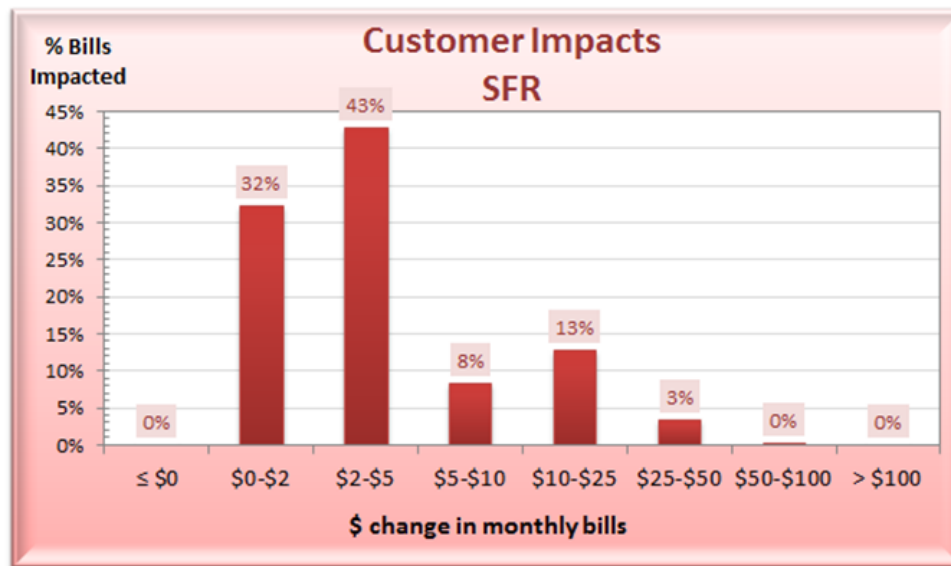
Figure 2-1 displays the bill impacts for SFR customers at different usage levels ranging from 8 HCF to 30 HCF per month.

Figure 2-1: Single-Family Residential Usage Impacts



As shown in Figure 2-1, customers with relatively lower water usage (from 8 to 10 HCF per month) experience a relatively low (2 percent) increase in their bills. The more water a customer uses, the larger the percentage increase in their bill. A customer that uses 30 HCF per month, which is well above the City's average usage, will experience a 30 percent increase in their monthly bill. This rate allows customers to control their water bills with their monthly water usage. While Figure 2-1 displays the proposed monthly water bills for a sample customer, Figure 2-2 displays the SFR customer impacts for the City as a whole.

Figure 2-2: Single-Family Residential Customer Impacts



The majority (43 percent) of customers in the City will experience a \$2 to \$5 dollar increase in their monthly bill. In addition, a large portion of the customer base (32 percent) will experience a \$0 to \$2 dollar increase in their monthly bill. This majority represents the average SFR customer in the City. While the average customer will experience a relatively small change in their monthly bill, there will be a few large water-usage customers that will experience a \$25 to \$50 increase in their monthly bill.

2.5 Proposed Water Rates

Table 2-5 displays the proposed rates from FY 2014 to 2019. FY 2014 rates were developed with the methodology explained in section 2.3. Rates from FY 2015 and onward correspond to the revenue adjustments shown on Table 1-3. The Rates will increase by 13 percent from FY 2014 to 2018. Table 2-5 displays the proposed commodity rates and meter charges for the City.

Table 2-5 Proposed Rates³

Meter Size	Effective Date					
	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18	Jan-19
5/8"	\$8.15	\$9.21	\$10.41	\$11.76	\$13.29	\$13.29
3/4"	\$8.15	\$9.21	\$10.41	\$11.76	\$13.29	\$13.29
1"	\$17.27	\$19.52	\$22.05	\$24.92	\$28.16	\$28.16
1 1/2"	\$32.31	\$36.51	\$41.26	\$46.62	\$52.68	\$52.68
2"	\$48.42	\$54.71	\$61.83	\$69.87	\$78.95	\$78.95
3"	\$95.39	\$107.79	\$121.80	\$137.64	\$155.53	\$155.53
4"	\$142.37	\$160.88	\$181.79	\$205.43	\$232.13	\$232.13
6"	\$283.31	\$320.14	\$361.76	\$408.79	\$461.93	\$461.93
8"	\$437.67	\$494.57	\$558.86	\$631.51	\$713.61	\$713.61
Customer Class	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18	Jan-19
SFR						
Tier 1	\$2.07	\$2.34	\$2.64	\$2.99	\$3.38	\$3.38
Tier 2	\$3.40	\$3.84	\$4.34	\$4.91	\$5.54	\$5.54
Tier 3	\$3.89	\$4.40	\$4.97	\$5.61	\$6.34	\$6.34
	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18	Jan-19
All Other Classes	\$2.69	\$3.04	\$3.43	\$3.88	\$4.39	\$4.39

3 Water Connection Fees

Connection Fees are a financial mechanism used to ensure that new customers pay their fair share of capital costs necessary to provide service. In the State of California, it is required that connection fees comply with the Mitigation Act (AB1600, Government Code 66000 et seq.), which states that there need be a nexus between the connection and costs, and that fees should be proportionate to the cost of providing service.

In developing Connection Fees for water and wastewater, there are several different approaches that can be used. For the Water System, RFC recommends a “hybrid” combination of the system buy-in method and the incremental cost approach to determine the connection fees, since there is already a large amount of assets in the system and there are significant planned capital projects associated with growth and new development.

For the system buy-in approach, we have used the replacement cost less depreciation (RCLD) method to determine the value of the Water Systems. This method considers the costs necessary to replace existing facilities but also recognizes that the capacity available in existing facilities is not new and is therefore adjusted for depreciation.

The City provided a listing of assets and capital projects through FY 2012. We calculated the replacement cost (RC) of the system for FY 2012 (as of 6/30/2012) by inflating historical costs using the annual average Handy Whitman Index (Handy Whitman). To recognize that the system is not new, we

³ The Outside City meter charges will be eliminated

subtracted the accumulated depreciation of those assets from the replacement cost to determine the value of the system known as replacement cost less depreciation (RCLD). The RCLD of the system in FY 2012 is \$10.2 million. When new users join the system, they will benefit from the City's cash reserves. It is therefore necessary to add cash reserves (approximately \$5.4 million) to determine the net assets value of the water system. Finally, the new users will pay the ongoing debt after joining the system and therefore the value of the system is reduced by the amount of the debt principal (\$0) since the City has no current debt obligations. Table 3-1, below, displays the total calculated system value.

Table 3-1: System Buy-In System Value

System Value	
RCLD:	\$10,198,332
(+) Add Reserves:	\$5,423,440
(-) Subtract Debt Principal:	\$0
Total Asset Value:	\$15,621,772

Current Number of Equivalent Dwelling Units in the City

The second step in calculating the connection fees using the system buy-in method is to determine the current capacity of the Water Systems. Dividing the value of the system by the capacity provides a unit cost for the capacity fee. The number of existing customers is expressed as equivalent meters. For water systems, capacity is usually expressed in meter equivalents rather than actual service connections. The benefit of using meter equivalents is that it relates the relative capacity of service connections for various meters to their respective sizes. For instance, a 1 1/2" meter is 2.0 equivalent 5/8" meters. The approach used in this study is expressing the number of existing customers in equivalent meters. Table 3-2 displays this figure.

Table 3-2: Number of Equivalent Meters

Meter Size	# of Meters	AWWA Ratios	# of EDU's
5/8"	6,097	1.00	6,097
3/4"	2	1.00	2
1"	415	2.50	1,038
1 1/2"	99	5.00	495
2"	187	8.00	1,496
3"	6	17.50	105
4"	15	31.50	473
6"	2	65.00	130
8"	1	120.00	120
Total	6,824		9,955

Water Rate Study

City of Hollister

The total number of EDUs in the system is 9,955. In order to obtain the dollar value per EDU, we obtained the total asset value calculated in Figure 3-1 (\$15,721,772) and divided by the total number of EDU's in the system (9,955) to arrive at a value of \$1,569 per EDU. As mentioned earlier, a hybrid approach of the system buy-in methodology and the incremental cost methodology was utilized to create the connection fees.

Incremental Cost Value

The City also provided a listing of capital projects and the percentage of each project attributable to extending existing capacity. This listing can be found in Table 3-3.

Table 3-3: Growth Related Capital Projects

Growth Related Assets	% Attributed to growth	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
2912 - Fallon Road Well #3 Rehabilitation	50%	\$162,500	\$625,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3001 - Fairview Tank Rehabilitation	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$25,000	\$0	\$250,000	
3013 - HUAWWMP	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
3018 - Intravia/Westside Water Tank and Wel	100%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
xxx - Water System Master Plan	100%	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
xxx - Nash Road - Well No 5 Rehabilitation	50%	\$0	\$0	\$0	\$0	\$0	\$25,000	\$150,000	\$625,000	\$0	\$0	\$0	
xxx - South Street - Well No. 4 Rehabilitation	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$150,000	\$625,000	
xxx - Bundinson Street - Well No. 2 Rehabilitat	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	
xxx - San Felipe Road - Well No. 1 Rehabilitati	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
xxx - Airline Highway - Well No. 6 Rehabilitati	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
xxx - Memorial Road booster Station Rehabilit	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
xxx - Fairview Tank Transmission Main Replac	50%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Growth Related Assets		\$162,500	\$875,000	\$0	\$0	\$0	\$25,000	\$150,000	\$632,500	\$50,000	\$150,000	\$900,000	\$2,945,000

The total value of the capital projects that is attributed to growth is \$2,945,000. The City estimates that these capital projects will be able to provide for an additional 2,233 equivalent dwelling units (EDU's). Thus, the additional cost per EDU is \$2,945,000 divided by 2,233 = \$1,319. Because the approach we used is a hybrid of the Incremental Cost approach and the Equity Buy-In approach, we add the cost per EDU of the Equity Buy-In Approach (\$1,569) and the cost per EDU of the Incremental Cost Approach (\$1,319) to arrive at the cost per new connection of \$2,888 per EDU.

Proposed Connection Fees

The proposed connection fees for all meter sizes are shown on Table 3-4 below.

Table 3-4: Proposed Connection Fees

Meter Size	Current Fees	Proposed Fees	% Change	\$ Difference
5/8 inch	\$2,430	\$2,888	19%	\$458
3/4 inch	\$2,430	\$2,888	19%	\$458
1 inch	\$5,750	\$7,220	26%	\$1,470
2 inch	\$17,030	\$14,440	-15%	-\$2,590
4 inch	\$51,090	\$50,542	-1%	-\$548
6 inch	\$102,180	\$90,975	-11%	-\$11,205
8 inch	\$159,590	\$187,726	18%	\$28,136
10 inch	\$194,620	\$346,571	78%	\$151,951